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| APPLICATION NO.                | FILING DATE                         | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|--------------------------------|-------------------------------------|----------------------|---------------------|------------------|--|
| 10/621,780                     | 07/16/2003                          | Douglas Jay Mathews  | G006001             | G006001 1672     |  |
| 23513 7590 10/14/2005 EXAMINER |                                     |                      |                     |                  |  |
|                                | MCKAY & HODGS<br>ST OFFICE PLAZA, S | SMITH, B             | SMITH, BRADLEY      |                  |  |
| 1900 GARDEN                    |                                     | O11L 220             | ART UNIT            | PAPER NUMBER     |  |
| MONTEREY,                      | CA 93940                            |                      | 2891                | <u></u>          |  |

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.  | Applicant(s)  |             |  |  |
|--|--|---|-------------|--|--|
| Office Action Commence   | 10/621,780   | MATHEWS ET AL   | - (H        |  |  |
| Office Action Summary  | Examiner   | Art Unit  |             |  |  |
|  | Bradley K. Smith   | 2891  |             |  |  |
| The MAILING DATE of this communication apperent of the Reply   | ears on the cover sheet with the c   | orrespondence ad  | Idress      |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION (6(a). In no event, however, may a reply be timil apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | I. tely filed the mailing date of this coorsists U.S.C. § 133). |             |  |  |
| Status   |  | •   |             |  |  |
| 1) Responsive to communication(s) filed on 05 Ju   | lv 2005.   |   |             |  |  |
|  | action is non-final.   |   |             |  |  |
| 3) Since this application is in condition for allowan  | ce except for formal matters, pro  | secution as to the  | e merits is |  |  |
| closed in accordance with the practice under E   | ·  |   |             |  |  |
|  |  |   |             |  |  |
| Disposition of Claims  |  |   |             |  |  |
| 4) Claim(s) <u>1-5,7-12,24-29,43 and 44</u> is/are pendi   |  | •   |             |  |  |
| 4a) Of the above claim(s) <u>43 and 44</u> is/are withdrawn from consideration.  |  |   |             |  |  |
| 5)⊠ Claim(s) <u>24-29</u> is/are allowed.  |  |   |             |  |  |
| 6)⊠ Claim(s) <u>1-5 and 7-12</u> is/are rejected.  |  |   |             |  |  |
| 7) Claim(s) is/are objected to.  |  |   |             |  |  |
| 8) Claim(s) 43 and 44 are subject to restriction an  | d/or election requirement.   |   |             |  |  |
| Application Papers   |  | •   |             |  |  |
| 9) The specification is objected to by the Examiner  |  | •   |             |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.  |  |   |             |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |  |   |             |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |  |   |             |  |  |
| 11)☐ The oath or declaration is objected to by the Ex  | aminer. Note the attached Office   | Action or form PT   | ΓO-152.     |  |  |
| Priority under 35 U.S.C. § 119   |  |   |             |  |  |
| 12) Acknowledgment is made of a claim for foreign  a) All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priority application from the International Bureau  * See the attached detailed Office action for a list of  | have been received. have been received in Application ity documents have been received (PCT Rule 17.2(a)).   | on No ed in this National                                       | Stage       |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)   | 4) Interview Summary   |   |             |  |  |
| Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)     Paper No(s)/Mail Date   | Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: search notes   | atent Application (PTC  | D-152)      |  |  |

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#### **DETAILED ACTION**

#### Election/Restrictions

43 44

1. Newly submitted claim 42 and 43 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the new claims disclose an antenna and a dielectric spacer, which makes it distinct from the original package, because the original package did not have a means to send or receive signals via radio waves.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 42 and 43 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Terui (US Patent 6,225,694). Terui discloses a first surface, a second surface, a side and a

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ground shield extending from said first surface to said second surface and adjacent said side; and an electronic component coupled to said first surface and disclose ground traces on the upper surface (see figure 1 and figure 6a). With regards to claim 2, Terui discloses wherein said ground shield comprises a plurality of electrically conductive vias (see figure 1). With regards to claim 3, Terui discloses the ground vias are spaced sufficiently close to one another to prevent radiation from passing between said ground vias (the examiner understands this to be an inherent part of the structure a "shield structure" would inherently not let radiation through). With regards to claim 4, Terui disclose wherein the ground shield extends around the periphery of the substrate (see figure 1). With regards to claim 5, Terui disclose a shield ring coupled to said first surface of said substrate, said shield ring defining a central region of said first surface of said substrate, said electronic component being coupled to said central region (see figures 1 and 6a). With regards to claim 7, Terui disclose the shield ring comprises upper ground traces and the ground traces are adjacent to the side of the substrate (see figures 6a-6c). With regards to claim 8, Terui disclose the shield coupled to the shield ring and the shield enclosing the electronic component (see figure 1). With regards to claim 9, Terui disclose the shield being connected to the shield ring through a conductive adhesive (see column 2 lines 50-55). With regards to claim 10, Terui disclose a substrate comprising a first surface comprising a central region defined by a shield ring; a shield electrically coupled to said shield ring, said shield being continuous; and an electronic component coupled to said central region (see figure 1). With regards to claims 11 and 12, Terui disclose said shield comprises a shield connection surface

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(rectangular annulus), said shield ring corresponding in shape to said shield connection surface.

### Allowable Subject Matter

3. Claims 24-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record neither teaches nor suggest within the context of the entire claim a first and second shield attached to a first and second shield rings claims (claims 24-29).

## Response to Arguments

5. Applicant's arguments filed 7/5/05 have been fully considered but they are not persuasive. The applicant contends that Terui fails to disclose the a shield ring coupled to said first surface and the shield ring comprising upper ground traces. Whereas the examiner contends that Terui does show ground traces in figure 6a (the ground traces are between the shield ring and the vias (34 and 5)).

#### Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley K. Smith whose telephone number is (571) 272-1884. The examiner can normally be reached on 10-6 Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Baumeister can be reached on (571) 272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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BRADLEY K. SMITH PRIMARY EXAMINER